

REMARKS

In the present Amendment, the subject matter of claim 10 has been incorporated into claim 11. In incorporating the subject matter of claim 10 into claim 11, the recited "0.4 mm" has been amended to recite "0.4 μm ." Support for this amendment can be found, for example, at page 5, line 6 of the specification. Claim 10 has been canceled.

Thus, claim 11 now recites an apparatus for fabricating a polymer hollow tube, wherein the polymer hollow tube has an inner wall with an arithmetic mean roughness of less than 0.4 μm .

Claim 8 has been amended to correct a typographical error.

Upon entry of the Amendment, which is respectfully requested, claims 1-9 and 11 will be pending.

Response to Rejection under 35 U.S.C. § 102

In Paragraph No. 2 of the Action, claim 11 is rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Park et al (U.S. Patent Publication No. 2002/0041043) ("Park").

Applicants respectfully submit that the above amendment obviates this rejection, and that present claim 11 is not anticipated by Park.

Reconsideration and withdrawal of the rejection are respectfully requested.

Response to the Rejections under 35 U.S.C. § 103

At Paragraph No. 6 of the Action, claims 1-4 and 6-10 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ilvashenko (U.S. Patent No. 6,086,999) in view of Nakahara et al (U.S. Patent No. 4,123,483) ("Nakahara").

At Paragraph No. 7 of the Action, claim 5 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ilvashenko in view of Nakahara as applied to claim 1 above, and further in view of Chimura et al (U.S. Patent No. 3,930,103) ("Chimura").

The presently claimed invention relates to a method of manufacturing a preform for producing a plastic optical component. Present claim 1 requires a graded-index core portion and a cladding portion in which the refractive index of the core portion continuously decreases from its center to the outer radius, and that the refractive index of the cladding portion is smaller than the center of the core portion by 0.03 or more.

On page 4 of the Action, the Examiner concedes that Ilvashenko does not specify that the refractive index of the cladding portion is smaller than that of the core portion by 0.03 or more. However, per the Examiner, Ilvashenko establishes the difference in refractive indices as a result effective parameter by teaching that the value determines how well the optical material conducts light. As support, the Examiner cited column 7, lines 24-25 of Ilvashenko.

In response, Applicants respectfully submit that there is no teaching, suggestion, motivation, or other reason to modify Ilvashenko to reach the presently claimed invention. A "particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." MPEP § 2144.05.

The Examiner cites column 7, lines 24-25 of Ilvashenko as teaching that the difference in refractive index determines how well the plastic optical component conducts light. See page 4, first paragraph of the Action. Yet what those lines actually state is merely that "[t]he refractive index of the core is greater than that of the sheathing such that the material is suitable to conduct light." This statement does not fairly suggest that the difference in refractive index between the

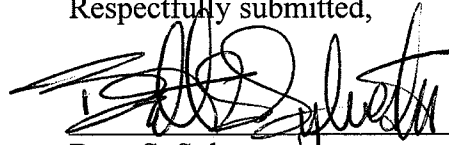
core and sheath should be 0.03 or more. Instead, Ilvashenko merely mentions that the difference in refractive index could be 0.001. See column 8, lines 53-65 of Ilvashenko. This casual disregard for the issue of a minimum difference in refractive index suggests that this factor does not need to be optimized or that Ilvashenko does not recognize this factor as an important result-effective factor in the presently claimed invention. Therefore, Ilvashenko does not teach this requirement of claim 1 and one of ordinary skill in the art reading Ilvashenko would not likely be motivated to optimize the process of Ilvashenko to obtain this value. Thus, Applicants respectfully submit that the proposed combination of Ilvashenko, Nakahara, and/or Chimura does **not** render claims 1-9 obvious.

Claim 10 has been canceled, so Applicants respectfully submit that the above amendment obviates the above rejection with respect to claim 10. As noted, the subject matter of claim 10 has been incorporated into claim 11. Claim 11 is not subject to this rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brett S. Sylvester", is written over a horizontal line.

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